Impact of tie strength and experience on the effectiveness of online service recommendations

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ABSTRACT

This study investigates the effects of tie strength between the two communicators, recommender experience, and their interactions on electronic word-of-mouth message credibility and purchase intentions, and the mediated moderation on intention. Prior research has rarely addressed the fact that the effect of tie strength moderated by recommender experience is mediated by the effect of message credibility on intention. The final sample comprised 302 students who participated in a 3 (tie strength: strong vs. weak vs. no tie) by 2 (experience: high vs. low) between-subject experiment. Multivariate analysis of covariance and bias-corrected bootstrapping analysis using the PROCESS macro were used to test the hypotheses. The results showed that tie strength and recommender experience positively affect message credibility and intentions. Further, recommender experience moderates the effect of tie strength on intentions, while the moderating effects on intention are mediated by message credibility. While prior research suggests that negative recommendations from people with strong ties affect message effectiveness, the results of the present study deviate from this and show that recommendations from weak ties are as persuasive as those from strong ties when the message is delivered by recommenders with experience.

1. Introduction

Online transactions and services create ambiguity and confusion related to consumer choices because of the heterogeneity of quality, the higher associated risk, and the intangible nature of services (Lim and Chung 2011). Thus, recommendation is considered an important factor for online services. Among the various media of recommendation, word-of-mouth (WOM) communication is the most influential in changing consumer attitudes and behavior. WOM is the act of exchanging marketing information among consumers (Katz and Lazarsfeld 1955, Alreck and Settle 1995). Consumers trust peer consumers more than they trust marketers since peers have no vested interests in selling goods (Lee and Youn 2009, Sen and Lerman 2007). Thus, consumers tend to purchase goods using information provided by other consumers (Bone 1995, Herr et al. 1991, Laczniak et al. 2001, Qin 2011).

Most prior studies of WOM have studied the presence of a network and emphasized the importance of strong ties (Brown and Reingen 1987). However, several studies have demonstrated that

recommendations from people with weak ties serve as informational bridges (Brown and Reingen 1987, Zhao et al. 2012).

The development of network technology on the Internet has transformed WOM into computer-mediated/electronic WOM (e-WOM) communication (Hennig-Thurau et al. 2004). Such e-WOM may occur on any number of platforms, such as retailers' websites, brand communities, independent websites, consumer blogs, and social networking sites (Herr et al. 1991, Lee and Youn 2009). Unlike the case with WOM, consumers cannot assess the credibility of e-WOM sources easily (Dou et al. 2012). Thus, prior studies have focused mainly on the messages' content characteristics (i.e., valence; see Filieri 2015, Bataineh 2015). However, their results have been mixed. Recent studies have thus investigated boundary conditions, including various consumer characteristics and platforms (Park and Kim 2008, Zhang et al. 2010, Lee and Youn 2009, Senecal and Nantel 2004).

To address these gaps in the extant literature, this study investigates the effects of two consumer characteristics, namely, tie strength between the communicators (i.e., strong, weak, or none) and recommender's experience (i.e., high or low), and their interactions on e-WOM message credibility and purchase intentions, and the mediated moderation on intentions. The conceptual research model investigated in this study is presented in Fig. 1.

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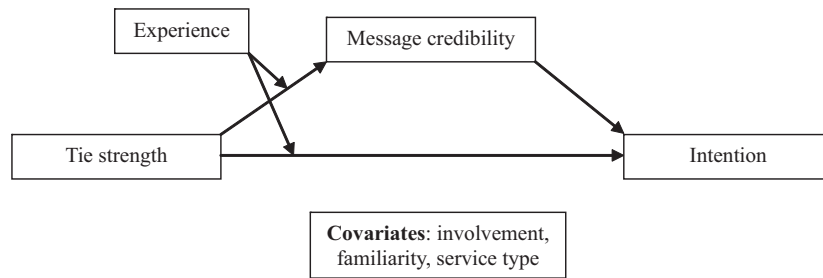 E-mail address: unlimited@knu.ac.kr

Fig. 1. Conceptual research model.

Prior studies have proposed that negative WOM from strong ties are important sources of recommendations. However, this research presents evidence contrary to these prior results and shows that weak ties are as influential in the recommendations of services as strong ties if the WOM comes from recommenders with experience. The present findings may bring unique theoretical and practical implications.

In terms of theoretical implications, the present study deviates from prior research by emphasizing the interplay of two consumer characteristics (tie strength and experience). First, prior studies on product/service recommendations focused on strong ties and neglected the importance of weak or no-tie relationships, especially in the online context. In contrast, this study investigates the effects that tie strength has on message credibility and purchase intentions. Thus, this study contributes to the extant literature by highlighting the importance of weak-tie relationships in services recommendations. Second, this research adds to the knowledge about consumer experience in relation to services recommendations. Even though experience is intuitively considered important, its impact on persuasiveness has not been widely confirmed in prior studies on e-WOM (Lim and Chung 2011, Racherla and Friske 2012). Third, and most importantly, the current study investigates the effect that tie strength moderated by experience has on message credibility and intention. Our results show that online recommendations from people high in experience with weak-tie relationships is as effective as that from people with strong ties in terms of message credibility and intentions. While most prior studies emphasize the importance of strong ties (Brown and Reingen 1987, Gilly et al. 1998), this study emphasizes weak-tie relationships.

In terms of practical implications, the results of this study could guide system managers to focus on tie strength and recommender experience. This emphasis could help system managers focus on more important aspects of user information. This shift in focus could provide narrower targeting opportunities for the managers. Though marketers have no control over online communications, they could motivate their review writers to post more relevant services-related information in terms of the recommenders' relational properties with the recommendation receivers and the experience levels of the recommenders.

2. Literature review

2.1. WOM and e-WOM communication

Research on traditional WOM has studied the network characteristics of advice providers and receivers. According to Steffes and Burgee (2009), consumers have a wide range of relationship ties within their social networks. These relational ties range from strong primary ties (such as those with friends and family members) to weak secondary ties (such as those with acquaintances) and nonexistent ties (such as those with strangers).

Recommendations from people with strong ties, higher homophily, credibility, and experience have been shown to be persuasive (Brown and Reingen 1987, Gilly et al. 1998). With regard to recommendation reception, receivers with high levels of expertise or experience tend to rely less on recommendations from others (Gilly et al. 1998). Using field observations, Brown and Reingen (1987) found that piano teacher recommendations based on strong ties were more likely to be used as sources of information for recommended goods (the "positive local effect"). Wirtz and Chew (2002) showed that when a customer was satisfied with a purchase, his/her WOM to a friend with strong ties was more likely to be favorable in recommending the goods to be purchased than his/her WOM to a friend with weak ties. Chung and Tsai (2009) demonstrated that people with a prevention focus orientation gave more WOM to recipients with strong ties than to those with weak ties, whereas people with a promotion focus orientation gave similar amounts of WOM to people with strong ties and those with weak ties. De Bryun and Lilien (2008) showed that tie strength plays an important role in initiating awareness in the context of email recommendations. Chu and Kim (2011) demonstrated that tie strength in a social networking context had a positive effect on opinion-seeking and opinion-passing behaviors. In sum, these prior studies showed that people tend to provide information in a more pronounced manner to those with strong ties.

However, a few prior studies have suggested that weak ties play an important role in recommendation (Granovetter 1973). Brown and Reingen (1987) suggested that recommendations from weak-tie sources serve a bridging function, allowing information to travel from one distinct subgroup of referral actors to another subgroup in the broader social system (the "network effect"). Zhao et al. (2012) showed in an online context that sources with ties of higher betweenness centralities have no significant information propagation advantages over sources with weak ties; the latter play a crucial role as an informational bridge in social networking sites, facilitating information propagation across isolated clusters. Steffes and Burgee (2009) investigated students' use of e-WOM (RateMyProfessor.com; henceforward, RMP) and found that students evaluated posted class information to be as influential as their own primary experience with the professor, and the information they gained from RMP was more influential compared to traditional WOM, such as speaking with their friends. Zhao and Xie (2011) demonstrated that online recommendations from close others were more influential compared to those from distant others in shifting near-future preferences, whereas recommendations from distant others were more effective compared to those from close others in shifting distant-future preferences.

However, in the case of e-WOM, it becomes difficult to interpret the effect of recommendations because of the lack of the source's credibility. Therefore, prior e-WOM studies have focused on the content characteristics of the messages (Dou et al. 2012, Chang and Wu 2014, López and Sicilia 2014). The content contrasts investigated in e-WOM studies include positive vs. neutral vs. negative